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Body Mass Index and Medical Care Expenditures Among North Carolina Adolescents Enrolled in Medicaid in 2004

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ABSTRACT

Objectives: Previous studies have documented that overweight and obese adults have substantially higher medical care expenditures than adults of normal weight, but there is little comparable data for children or adolescents. This study examines medical care expenditure and utilization patterns in a sample of adolescents in North Carolina enrolled in Medicaid, stratified by body mass index (BMI) categories.

Methods: North Carolina public health department records, which include clinically measured height and weight, were linked to 2004 North Carolina Medicaid enrollment records. For the 3,528 adolescents ages 12-18 whose records matched, we examined their entire paid claims history for 2004. Total expenditures by gender and race, hospital expenditures, physician expenditures, and prescription drug expenditures were tabulated, stratified by BMI. We also examined the proportion of adolescents who had a paid claim in selected diagnosis categories by BMI.

Results: Overall, and in most demographic and service categories, overweight and at risk of overweight adolescents had substantially higher average Medicaid expenditures compared to normal weight adolescents. Overweight adolescents were significantly more likely to have a paid claim for services related to diabetes, asthma, and other respiratory conditions.

Conclusions: This study presents evidence of negative health consequences of overweight as early as adolescence.



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